

# Vermont Airport System and Policy Plan

## Table of Contents

### Executive Summary

Executive Summary .....	ES.1
-------------------------	------

### Chapter One: Study Overview and System Goals

Plan Purpose and Need .....	1.1
System Plan Process .....	1.3
Plan Outreach .....	1.4
System Goals .....	1.5
System Performance Measures and Benchmarks .....	1.6
Performance Measure: Accessibility .....	1.6
Performance Measure: Development .....	1.7
Performance Measure: Safety and Security .....	1.8
Other Points .....	1.8
Next Steps .....	1.9

### Chapter Two: Inventory

Introduction .....	2.1
Study Airports .....	2.2
Inventory Process .....	2.4
Aviation Facilities .....	2.4
Airport Overview .....	2.5
Airside Facilities .....	2.9
Airport Navigational Aids and Lighting .....	2.11
Airport Landside Facilities .....	2.14
Aviation Activity Statistics .....	2.16
Summary .....	2.19

### Chapter Three: Airport Roles

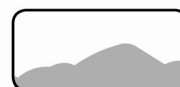
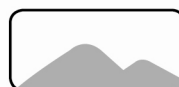
Introduction .....	3.1
System Stratification Factors .....	3.1
System Stratification Process .....	3.2
Population within 20 Nautical Miles .....	3.4
Based Aircraft .....	3.4
Total Operations .....	3.4
Approach Type .....	3.5

# Vermont Airport System and Policy Plan

Runway Surface .....	3.5
IFR Operations .....	3.6
Runway Length.....	3.6
Economic Impact .....	3.6
System Stratification Data and Results .....	3.7
Airport Functional Levels .....	3.9

## Chapter Four: Forecasts of Aviation Activity

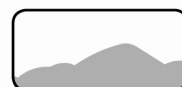
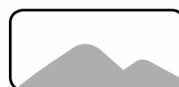
Introduction .....	4.1
Socioeconomic Conditions.....	4.2
Population.....	4.2
Employment.....	4.3
Industry Trends .....	4.5
General Aviation .....	4.5
Commercial Airline Industry Trends .....	4.8
Forecast Approach and Considerations .....	4.11
General Aviation Considerations.....	4.11
Commercial Service Considerations.....	4.14
General Aviation Projections.....	4.14
Based Aircraft Projections .....	4.15
Market Share Methodology: Share of U.S. Total Active General Aviation	
Aircraft .....	4.15
Socioeconomic Methodology: County Population Projections.....	4.16
Socioeconomic Methodology: County Employment Projections .....	4.17
FAA Forecasted General Aviation Fleet Methodology: Airport Roles .....	4.20
Preferred Based Aircraft Projections.....	4.23
Based Aircraft Fleet Mix .....	4.24
General Aviation Operations Projections.....	4.27
Operations Per Based Aircraft (OPBA) .....	4.28
Socioeconomic Methodology: County Population Projections.....	4.28
Socioeconomic Methodology: County Employment Projections .....	4.29
Preferred General Aviation Operations Projection Methodology.....	4.35
Commercial Service Activity Projections .....	4.36
Burlington International Airport.....	4.36
Rutland State Airport .....	4.37
Military Activity Projections .....	4.38
Summary .....	4.39



# Vermont Airport System and Policy Plan

## Chapter Five: Facility and Service Objectives

Introduction .....	5.1
National Service Airports .....	5.3
Function.....	5.3
Activity.....	5.3
Facilities/Services .....	5.3
Runway Length.....	5.3
Regional Service Airports .....	5.4
Function.....	5.4
Activity.....	5.4
Facilities/Services .....	5.4
Runway Length.....	5.4
Local Service Airports.....	5.5
Function.....	5.5
Activity.....	5.5
Facilities/Services .....	5.5
Runway Length.....	5.5
Specialty Service Airports .....	5.6
Function.....	5.6
Activity.....	5.6
Facilities/Services .....	5.6
Runway Length.....	5.6
Airport Capital Facility Program (2000) .....	5.7
Facility and Service Objectives.....	5.7
ARC.....	5.8
Runway .....	5.8
Taxiway.....	5.9
Navigational Aids (NAVAIDs) .....	5.9
Approach.....	5.9
Lighting.....	5.10
Weather .....	5.10
Ground Communications .....	5.10
Covered Storage/Apron.....	5.11
Fencing.....	5.11
Auto Parking.....	5.12
GA Terminal/Administration Building/FBO/Fuel/Maintenance .....	5.12
Ground Transportation .....	5.13
Summary .....	5.16



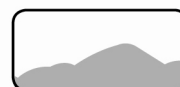
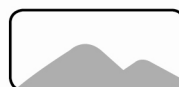
# Vermont Airport System and Policy Plan

## Chapter Six: Current System Performance

Introduction .....	6.1
Performance Measure: Accessibility.....	6.2
Benchmark: Percent of Vermont’s Population and Land Area within 60 Minutes of an Airport with Commercial Service (Vermont and Neighboring Airports).....	6.3
Benchmark: Percent of Vermont’s Population and Land Area within 30 Minutes of an Airport with a 5,000-Foot Long Runway.....	6.4
Benchmark: Percent of Vermont’s Population and Land Area within 30 Minutes of an Airport with a 5,000-Foot Long Runway Having a Precision Approach.....	6.4
Benchmark: Percent of Vermont’s Population and Land Area within 30 Minutes of Airports in Each Role Category.....	6.5
Performance Measure: Development.....	6.16
Benchmark: Percent of Vermont’s Population and Land Area Exclusively Served (within 30 minutes) of a Privately Owned Airport.....	6.16
Benchmark: Percent of System Airports in Each Role Category Meeting Minimum Facility and Service Objectives .....	6.17
Benchmark: Percent of System Airports in Each Role Having a PCI of “Good” or Better.....	6.20
Benchmark: Percent of System Airports in Each Role Having an Airport Layout Plan (ALP) Updated in the Last 10 Years .....	6.22
Benchmark: Percent of System Airports in Each Role Having Local Airport-Related Zoning.....	6.24
Benchmark: Percent of System Airports in Each Role That are Included in Regional Land Use Plans That Include Airport-Compatible Land Use in The Airport Environs.....	6.26
Performance Measure: Safety and Security .....	6.28
Benchmark: Percent of System Airports in Each Role That Meet Applicable FAA Airport Design Standards.....	6.29
Benchmark: Percent of System Airports in Each Role That Meet Applicable VTrans or TSA Security-Related Recommendations.....	6.30
Summary .....	6.31

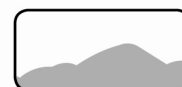
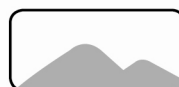
## Chapter Seven: Future System Performance and Recommendation

Introduction .....	7.1
Target Performance Measure: Accessibility .....	7.2
Benchmark: Percent of Vermont’s Population and Land Area within 60 Minutes of an Airport with Commercial Service .....	7.2
Benchmark: Percent of Vermont’s Population within 30 Minutes of an	



# Vermont Airport System and Policy Plan

Airport with a 5,000-Foot Long Runway .....	7.3
Benchmark: Percent of Vermont's Population within 30 Minutes of an	
Airport with a 5,000-Foot Long Runway Having a Precision Approach .....	7.4
Benchmark: Percent of Vermont's Population and Land Area within	
30 Minutes of Airports in Each Role Category .....	7.5
National Service .....	7.6
Regional Service .....	7.7
Local Service .....	7.7
Specialty Service .....	7.8
Target Performance Measure: Development .....	7.8
Benchmark: Percent of Vermont's Population and Land Area Exclusively	
Served (within 30 Minutes) of a Privately Owned Airport .....	7.8
Benchmark: Percent of System Airports Meeting Minimum Facility and	
Service Objectives .....	7.9
Future ARC Analysis and Recommendations .....	7.9
Future Runway Length Analysis .....	7.10
Future Runway Width Analysis .....	7.11
Future Runway Strength Analysis .....	7.12
Future Taxiway Analysis .....	7.13
Future Approach Analysis .....	7.14
Future NAVAID Analysis .....	7.16
Future Lighting Analysis .....	7.17
Future Weather Reporting Analysis .....	7.18
Future Covered Storage .....	7.19
Future Aircraft Apron Future Analysis .....	7.20
Future Terminal/Administration Building Analysis .....	7.22
Future Fencing Analysis .....	7.22
Future Auto Parking Future Analysis .....	7.23
Future Fuel Analysis .....	7.24
Future FBO Analysis .....	7.25
Future Aircraft Maintenance Analysis .....	7.26
Future Ground Transportation Analysis .....	7.26
Benchmark: Percent of System Airports in Each Role Having a PCI of	
"Good" or Better .....	7.27
Benchmark: Percent of System Airports in Each Role Having an Airport	
Layout Plan (ALP) Updated in the Last 10 Years .....	7.28
Benchmark: Percent of System Airports in Each Role Having Local Airport-	
Related Zoning .....	7.29
Benchmark: Percent of System Airports in Each Role that are Included in	
Regional Land Use Plans that Include Airport-Compatible Land Uses in the	
Airport Environs .....	7.30
Performance Measure: Safety and Security .....	7.31



# Vermont Airport System and Policy Plan

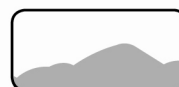
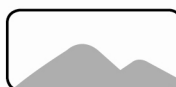
Development Costs .....	7.31
Systemwide Recommendations.....	7.37

## Chapter Eight: Policy Plan

Role, Vision and Mission for Aviation.....	8.1
Role of Aviation in Vermont .....	8.2
Vision of Vermont's Airport System.....	8.3
Aviation Mission for the Agency of Transportation .....	8.4
VTrans Aviation Goals .....	8.4
Current Aviation Policies .....	8.5
Airport Points .....	8.6
Project Points.....	8.6
Recommended Aviation Policies.....	8.7
Aviation Performance Categories and Measures .....	8.8
Performance Category: Accessibility .....	8.8
Performance Category: Development.....	8.9
Performance Category: Safety and Security.....	8.10
Performance Category: Funding and Economics .....	8.10
Performance Category: Maintenance .....	8.11
Aviation Performance Measure and Targets.....	8.12
Performance Measure and Target Actions.....	8.15

## Appendices

Appendix A: Rates and Charges .....	A.1
Appendix B: Photoslope Analysis.....	B.1
Appendix C: Acoustical Counting Review .....	C.1
Appendix D: Facility and Service Objectives.....	D.1
Appendix E: Individual Airport Capital Plans .....	E.1
Appendix F: Glossary of Terms .....	F.1



# Vermont Airport System and Policy Plan

## List of Exhibits

### Chapter One: Study Overview and System Goals

Exhibit 1-1 – Study Process .....	1.3
-----------------------------------	-----

### Chapter Two: Inventory

Exhibit 2-1 – Public-Use Airport Location and Ownership.....	2.3
Exhibit 2-2 – Public-Use Airport Service Classification .....	2.7
Exhibit 2-3 – Airport Service Classification .....	2.8

### Chapter Three: Airport Roles

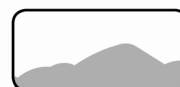
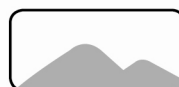
Exhibit 3-1 – Public-Use Airport Functional Roles.....	3.11
--	------

### Chapter Four: Forecasts of Aviation Activity

Exhibit 4-1 – Annual Revenue Passenger Enplanements.....	4.10
Exhibit 4-2 – 2005 Vermont Based Aircraft by Role.....	4.13
Exhibit 4-3 – 2005 General Aviation Operations by Role.....	4.14
Exhibit 4-4 – Projections of Based Aircraft at Vermont System Airports.....	4.23
Exhibit 4-5 – Comparison of 2005 Vermont and U.S. Based Aircraft by Type .....	4.25
Exhibit 4-6 – Projections of General Aviation Operations at Vermont System Airports .....	4.35

### Chapter Six: Current System Performance

Exhibit 6-1 – 60 Minute Drive Time of Commercial Airport .....	6.8
Exhibit 6-2 – 30 Minute Drive Time of 5,000' Runway .....	6.9
Exhibit 6-3 – 30 Minute Drive Time of 5,000' Runway with Precision Approach.....	6.10
Exhibit 6-4 – 30 Minute Drive Time of National Service Airport .....	6.11
Exhibit 6-5 – 30 Minute Drive Time of Regional Service Airports.....	6.12
Exhibit 6-6 – 30 Minute Drive Time of Local Service Airports .....	6.13
Exhibit 6-7 – 30 Minute Drive Time of Specialty Service Airports .....	6.14
Exhibit 6-8 – Entire System .....	6.15
Exhibit 6-9 – Areas Served Exclusively by Privately Owned Airports .....	6.18
Exhibit 6-10 – Performance Measure: Development Airports Meeting Minimum Facility and Service Objectives.....	6.19

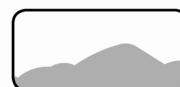
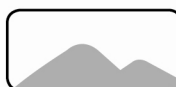


# Vermont Airport System and Policy Plan

Exhibit 6-11 – Performance Measure: Development Airports Meeting Pavement Condition Objectives .....	6.22
Exhibit 6-12 – Performance Measure: Development Airports Having an ALP Updated in Past 10 Years .....	6.24
Exhibit 6-13 – Performance Measure: Development Airports Having Local Airport-Related Zoning.....	6.26
Exhibit 6-14 – Performance Measure: Development Airports Included in Regional Land Use Plans with Compatible Land Uses in Airport Environs .....	6.28

## Chapter Seven: Future System Analysis and Recommendation

Exhibit 7-1 – Total Systemwide Capital Needs – By Eligible Funding Source ...	7.34
Exhibit 7-2 – Total Systemwide Capital Needs – By Airport Role.....	7.34
Exhibit 7-3 – Statewide Projects by Type .....	7.37





# Vermont Airport System and Policy Plan

## List of Tables

### Chapter Two: Inventory

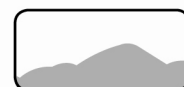
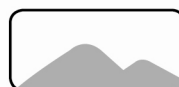
Table 2-1 – Airport Overview.....	2.6
Table 2-2 – Airside Facilities.....	2.10
Table 2-3 – Airport Navigational Aids and Lighting.....	2.12
Table 2-4 – Airport Landside Facilities.....	2.15
Table 2-5 – Based Aircraft by Airport.....	2.17
Table 2-6 – Aircraft Operations.....	2-18

### Chapter Three: Airport Roles

Table 3-1 – Stratification Factors and Raw Data.....	3.3
Table 3-2 – Stratification Factors and Ratings.....	3.8
Table 3-3 – Vermont Airport System Functional Roles.....	3.10

### Chapter Four: Forecasts of Aviation Activity

Table 4-1 – Historic Vermont and U.S. Population.....	4.2
Table 4-2 – Population Projections by County.....	4.3
Table 4-3 – Historic Labor Force, Employment and Unemployment Rate.....	4.4
Table 4-4 – Employment Projections by County.....	4.5
Table 4-5 – 2005 Based Aircraft in Vermont.....	4.12
Table 4-6 – 2005 General Aviation Operations.....	4.13
Table 4-7 – Projections of Statewide Based Aircraft U.S. Market Share Methodology.....	4.15
Table 4-8 – Projections of Based Aircraft Vermont Market Share Methodology.....	4.16
Table 4-9 – Projections of Based Aircraft Projected Statewide Population Growth Methodology.....	4.18
Table 4-10 – Projections of Based Aircraft Projected Statewide Employment Growth.....	4.19
Table 4-11 – Projections of Based Aircraft Airport Roles.....	4.21
Table 4-12 – Preferred Based Aircraft Projections.....	4.24
Table 4-13 – 2010 Projections of Based Aircraft Fleet Mix.....	4.26
Table 4-14 – 2015 Projections of Based Aircraft Fleet Mix.....	4.26
Table 4-15 – 2025 Projections of Based Aircraft Fleet Mix.....	4.27
Table 4-16 – Vermont Preferred Based Aircraft Fleet Mix Projection.....	4.27
Table 4-17 – Projections of Operations OPBA Methodology.....	4.30
Table 4-18 – Projections of Operations Population Growth Methodology.....	4.31



# Vermont Airport System and Policy Plan

Table 4-19 – Projections of Operations Employment Growth Methodology .....	4.33
Table 4-20 – Preferred General Aviation Operations .....	4.36
Table 4-21 – Projected Commercial Operations at Burlington International.....	4.37
Table 4-22 – Projected Enplanements at Burlington International .....	4.37
Table 4-23 – Projected Commercial Operations at Rutland State.....	4.38
Table 4-24 – Projected Enplanements at Rutland State .....	4.38
Table 4-25 – Military Operations at Public-Use Airports .....	4.39
Table 4-26 – Projections of Total Operations at Vermont’s Public Use Airports .....	4.40

## Chapter Five: Facility and Service Objectives

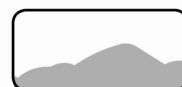
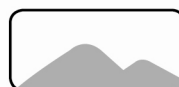
Table 5-1 – Vermont Airport System Functional Roles .....	5.2
Table 5-2 – Minimum Facility/Service Objectives.....	5.14

## Chapter Six: Current System Performance

Table 6-1 – Performance Measure: Development Airports Meeting Pavement Condition Objectives.....	6.21
Table 6-2 – Performance Measure: Development Airports Having an ALP Updated in Past 10 Years.....	6.23
Table 6-3 – Performance Measure: Development Airports Having Local Airport-Related Zoning .....	6.25
Table 6-4 – Performance Measure: Development Airports Included in Regional Land Use Plans with Compatible Land Uses in the Airport Environs .....	6.27

## Chapter Seven: Future System Analysis and Recommendation

Table 7-1 – Airport Recommended to have a 5,000’ or Longer Runway.....	7.4
Table 7-2 – Future ARC Objective.....	7.10
Table 7-3 – Future Runway Length Objective Analysis .....	7.11
Table 7-4 – Future Runway Width Objective Analysis .....	7.12
Table 7-5 – Future Runway Strength Objective Analysis.....	7.13
Table 7-6 – Future Taxiway Objective Analysis.....	7.14
Table 7-7 – Future Approach Objective Analysis .....	7.15
Table 7-8 – Future Airport NAVAID Objective Analysis.....	7.16
Table 7-9 – Future Lighting Objective Analysis.....	7.17
Table 7-10 – Future Weather Reporting Objective Analysis.....	7.18
Table 7-11 – Future Ground Communications Objective Analysis .....	7.19
Table 7-12 – Future Covered Storage Objective Analysis .....	7.20
Table 7-13 – Future Aircraft Apron Needs Analysis.....	7.21



# Vermont Airport System and Policy Plan

Table 7-14 – Future Terminal/Administration Building Analysis .....	7.22
Table 7-15 – Future Fencing Objective Analysis .....	7.23
Table 7-16 – Future Auto Parking Objective Analysis .....	7.24
Table 7-17 – Future Fuel Needs Objective Analysis.....	7.25
Table 7-18 – Future Maintenance Objective Analysis.....	7.26
Table 7-19 – Future Ground Transportation Objective Analysis.....	7.27
Table 7-20 – Future Pavement Condition Objective Analysis .....	7.28
Table 7-21 – Future ALP Update Objective Analysis.....	7.29
Table 7-22 – Airports Recommended for Local Airport-Related Zoning.....	7.30
Table 7-23 – Airports Recommended to be Included in Regional Land Use Plans with Compatible Land Uses in the Airport Environs.....	7.31
Table 7-24 – Total Systemwide Capital Needs .....	7.33
Table 7-25 – National Service Projects by Type.....	7.35
Table 7-26 – Regional Service Projects by Type.....	7.35
Table 7-27 – Local Service Projects by Type .....	7.36
Table 7-28 – Specialty Service Projects by Type .....	7.36

